Big Sky, Bigger Airliner

Why didn't I see it?

by LCdr. Philip Gerard

"Traffic ten o'clock!"

"Tally! Wow, that was close!"

We had been flying in our Hawkeye, equipped with the latest APS-145 radar, trying to find low-and-slow fliers and go-fast boats. It was daytime and CAVU to the moon. So why didn't I see that airliner? Why didn't someone in the back end give me a traffic call? I was disconcerted by my inability to complete a primary mission: see and avoid.

I estimated that our E-2C had passed 500 feet vertically and 1,000 feet laterally from that airliner, which are the limits imposed by OPNAVINST 3710.7. The problem was that I had avoided violating the limits through no action of my

own or that of my crew. Either the pilot of the airliner had clearance on his present course, or he had maneuvered (possibly spilling the passengers' coffee) to avoid me. I certainly didn't make any evasive maneuver; I never saw the other aircraft in time to increase our separation. My only correct action was to fly a VFR, semicircular patern.

We had been flying a counter-narcotics mission under "due regard" in the Caribbean. We were monitoring the local control frequency. Shortly after our close encounter, we heard one of the pilots of the commercial jet ask the controller if there were any military aircraft operating in the area. It wasn't very hard to figure out we weren't regular, commercial traffic. The controller stated that he knew we were out there, but that we had switched off his frequency earlier when we went operational. The last position he had on us was nowhere near the airliner's position.

Because of our heading and the limited visibility from our cockpit, we didn't get a visual on the aircraft until our positions were very close. I determined that the near-miss occurred near an airway. During the rest of the flight, I remained more aware of where we were in relation to airways. I requested traffic calls from the back-end crew when our cockpit visibility was not optimal for crossing a particular airway.

I didn't think about the incident until the next day, when I talked to the pilot of that particular aircraft. He tracked me down, because he needed to get some facts for the internal incident report he was writing for his airline. I explained to him that we fly "due regard" in VMC and at VFR cruising altitudes, and that we didn't intend to get as close as we did. We had a very interesting conversation—airline pilots worry about military aircraft. We ended on a good note, and we each learned something new that day.

As the aircraft commander, I failed in several ways. I didn't pay enough attention to airline traffic in the area, and I relied too heavily on our ability to detect traffic (by using our radar) well before we saw it. Although I was aware of airways in my flight path, I didn't emphasize keeping my aircraft in the optimum position to see airline traffic. Here are the lessons learned and operating procedures that I intend to apply in the future.

"Big sky, little plane." Even though we all know that we absolutely cannot rely on that theory, I proved it again.

In the United States, our air traffic control depends heavily on radar. Our system allows us to receive traffic calls on VFR aircraft not under ATC control. In other parts of the world, especially in international airspace, air traffic control by other countries is often procedural. Position reporting is king. In such environments, airliners don't get a heads-up on traffic that doesn't report. We have to avoid other aircraft.

Watch for those things that lead you to drop your guard or distract you. Flight planning must include the airway structure. Keep track of your flight path and recognize when you are flying near airways.

Keep your aircraft perpendicular to an airway when crossing it. If you can't cross on the perpendicular, get a radar picture from your crew or outside controller. When paralleling airways, allow a minimum of 5 NM separation.

Listen on the ATC frequency. You can gain some situational awareness from the position reports of airliners. Be extra vigilant near terminal areas.

Have a radar contract. In your brief, make someone responsible for own-ship flight following.

Most airliners under procedural control follow airways and make position reports to assist ATC. They are predictable, and we can use that predictability to avoid close calls.

Our military mission while flying in international airspace requires us to fly together with airliners. Those pilots usually have no idea of our flight path or intentions until either their eyeballs, or TCAS, alerts them to our presence. Since it is often not tactically feasible to fly under IFR, we need the flexibility that "due regard" flying affords us. We have to maintain separation from other aircraft and keep those airline pilots from spilling their customers' coffee.

LCdr. Gerard flies with VAW-117 and is that squadron's safety officer.